

# **FACT SHEET**



## UNITED STATES AIR FORCE

JEFX00/Public Affairs

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# Joint Expeditionary Force Experiment 2000

JEFX is a Chief of Staff of the Air Force-sponsored experiment that combines live forces, models, simulations, and technology insertion to create a realistic warfighting environment to explore and evaluate new and promising technologies and processes.

JEFX provides the Air Force a vehicle for experimentation with operational concepts and technologies that enhance capabilities of the 21<sup>st</sup> Century Aerospace Force. It is a broader effort to implement Joint Vision 2020, exploit the Revolution in Military Affairs and demonstrate emerging Air Force capabilities to deploy and employ decisive aerospace power for the joint force commander.

JEFX 2000 is an opportunity to discover better ways to accomplish Air Force missions in a joint/combined environment. JEFX 2000 provides a realistic environment of simulations and live-fly forces into which advanced technology and innovative processes are introduced and evaluated to determine their potential for enhancing Air Force Core Competencies. This environment is created from 35 individual models, simulations and simulators at 11 sites nation-wide and is combined with approximately 100 individual live-fly aircraft flying over the Nellis AFB ranges. This will create a dynamic and exciting operational environment for our warfighters to explore the 45 process and technology initiatives that fall under five mission areas.

## **JEFX Concept of Operations:**

In a distributed, collaborative environment, we will enhance Expeditionary Air Force capabilities by experimenting with all AF Core Competencies through five mission threads...

Providing agile combat support to expeditionary aerospace forces - 11 system & 2 process initiatives

Executing *time critical targeting* of aerospace forces in pursuit of alliance objectives as directed by the CFACC – 8 system & 2 process initiatives

Dynamically *employing air mobility* forces to deploy and sustain expeditionary forces – 5 system initiatives

Dynamically executing *ISR Battle Management* by controlling sensors and processing, exploiting and disseminating intelligence, surveillance and reconnaissance information – 8 system & 4 process initiatives

Fusing multiple source information into a *Joint BattleSpace Infosphere* and disseminating it throughout a distributed C2 architecture – 4 system & 1 process initiatives

#### **JEFX 2000 Initiative List**

Initial PACAF Operations Support Center (POSC) Response in Regional Crisis Distributed ACS Operations

Distributive SOF C2

Intelligence, Surveillance and Reconnaissance Battle Management (ISRBM) Joint Battlespace Infosphere Management (JBIM)

Battle Control Center (BCC)

Time Critical Targeting (TCT)

Collaborative Beddown Planner (CPB)

Combat Support & Force Protection Command & Control (CSC2)

Joint Assistant for Deployment and Execution (JADE)

Logistics Simulation and Analysis Model (LogSAM)

GCSS-AF Combat Ammunition System (CAS)

Automated Data Upload Process for Quick-Reaction Site Surveys

Joint Weather Impacts System (JWIS)

Civil Engineer Beddown and Ability to Survive and Operate (CEB & ATSO)

War Reserve Material Capability Assessment (WRM-CA)

Wing-level Information for Parts Prediction (WIPP)

Identification/Course of Action Analysis-Medical Surveillance in an AEF and the Identification of a BW/CW Event

Virtual Airline Airfield Manager (AFM)

Expeditionary Integrated Flight Management (EIFM)

Integrated Information for Global Reach (IFGR)

Deployable Consolidated AMC Mission Planning System (CAMPS)

Time-Phased Force Deployment Data (TPFDD) In An Hour

Integrated Collection Management Advanced Concept Technology Demonstration (ICM-ACTD)

NIMA Support to the Warfighter

Dynamic Moving Target Information Exploitation (DMTIX)

Integrated Space-Based and Airborne Hyperspectral Imaging (HSI) Sensors Enhanced Intelligence Data Analysis System for Spacecraft (IDASS-E)

Broadcast-Request Imagery Technology Experiment (BRITE)

Cooperative Cross-Platform SIGINT Geolocation

Overhead OPELINT Geolocation, User Interface

Vulnerability Assessment and Risk Management (VA/RM) Experiment for Info Assurance

Trusted Transfer Agent for Reach Down (TTA4RD)

Master Caution Panel (from JEFX 99)

Joint Battlespace Infosphere "Wright Flyer" (JBIWF)

Joint Applications for Speech Technology (JAST)-Theater Air Planning (TAP) Mission Analysis Tracking and Tabulation System/Integrated Targeting

Environment (MATTS/ITE)

Bomber Enhanced Tactical Interface (BETI)

Attack Operations Decision Aid (AODA)

TBMCS/ABCS Interoperability

Army Space Command

AFSPC Classified

Talon Gateway

Project SUTER

PANTHER DEN

#### **Major Operational Nodes For JEFX 2000**

There are a number of sites and nodes across the continental United States and the Pacific theater all connected through an electronic "Global Information Grid" network. They include:

The **Combined Air Operations Center** (CAOC) at Hurlburt Field, FL that will simulate an Aerospace Operations Center that has been deployed to an overseas location and will host the Combined Forces Air Component Commander and his air operations command and control functions.

The **Combined Air Operations Center-Forward** (CAOC-F) at Nellis AFB, NV that will be the focal point for prosecuting time critical targeting as an extension of the CAOC.

Deployed **Expeditionary Operations Center** (EOC), also at Nellis AFB consisting of wing-level command and control elements of an Air Expeditionary Force that plan and execute missions tasked by the CAOC through the Air Tasking Order (ATO).

The **Operations Support Center** (OSC) at Langley AFB, VA will serve as the primary reach back node in the experiment's

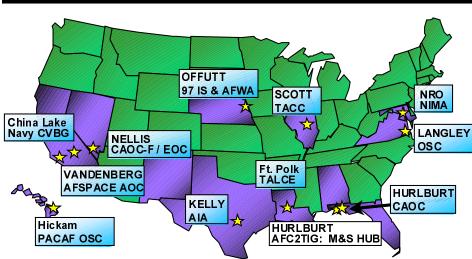
distributed operations scenario. It will provide the majority of the Air Force Forces (AFFOR) support functions in collaboration with CAOC AFFOR personnel.

The **Tanker Airlift Control Center** (TACC) at Scott AFB, IL manages worldwide airlift and tanker support and integrates missions into the combat theater.

The **Air Force Space Air Operations Center** (AFSPACE AOC) at Vandenberg AFB, CA integrates support from space sensors and communications satellites and knowledge of the adversaries' space capabilities into CAOC operations.

The Air Intelligence Agency (AIA) at Kelly AFB, TX and the Air Force Weather Agency (AFWA) at Offutt AFB, NE provide intelligence and weather information to the distributed operations network and integration into ATO planning and execution.

# **JEFX 2000 Operational Nodes**



# **Modeling and Simulation**

In addition to the operational locations, JEFX 2000 will use a Modeling and Simulation Network of 35 models, simulation and simulators at 11 sites to create a robust constructive and virtual battlespace environment. That environment will support initiative exploration and act as a force multiplier for the live environment.

#### **MILLENIUM CHALLENGE 2000**

JEFX 2000 is part of the U.S. Joint Forces Command's
Millennium Challenge 00 joint warfighting experiment that includes
the Army's Joint Contingency Force Advanced Warfighting
Experiment, the Navy's Fleet Battle Experiment Hotel, and the
Marines Corp's Millennium Dragon large-scale experiment.

#### **JEFX 2000 "LIVE-FLY" PLAYERS**

JEFX will employ more than 100 aircraft flying more than 300 sorties over the Nellis Ranges and the Joint Readiness Training Center at Ft. Polk, La.

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Organization 53WG	TYPE A-10 F-15E F-15C F-16CJ F-16CG
	HH-60
938RQW 28 BW	HH-60 B-1
366WG	F-15E
162FW (ANG)	F-16
49FW	F-117
552ACW	E-3
93ACW	E-8
55WG/AFMC	RC-135
9RW 509 BW	U-2 B-2
917WG (AFR)	B-52
ASC	GH
57WG	Predator
AFMC	Twin Otter
SWC	Space Based Radar
23FG	A-10/OA-10
AMC AFRL	C-130 C-135
AFR	F-16
NASA	WB57
USN	EA-6B
AFMC	EC-130H
366WG	KC-135
AMC	KC-135
AFSOC ANG	MC-130E EC-130
USA	AH-64
USMC	F-18
USMC	F-18

A-3

USN